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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | • CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|--------------------|
| 10/687,311 | 10/16/2003 | Takechito Sugawara | 9281-4674 | 7893 |

7590 03/07/2007
Brinks Hofer Gilson & Lione
P.O. Box 10395
Chicago, IL 60610

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| EXAMINER |
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PARTHASARATHY, PRAMILA

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2136

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/07/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/687,311

Applicant(s)

SUGAWARA, TAKEHITO

Examiner

Pramila Parthasarathy

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>4/12/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the communication 3/3/2006. Preliminary amendments were filed on 10/16/2003 and Claims 1 – 5 were amended. Claims 1 – 5 are currently pending.

Priority

2. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

Information Disclosure Statement

3. An initialed and dated copy of Applicant's IDS form 1449 is attached to the Office action.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 2136

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Amended Claims 1 – 4 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 2 of U.S. Patent No. 7,002,449. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant case, all elements of claims 1 – 5 correspond to the claims of 1 – 2 of the patent claims, except in the instant claims the element “an encryption unit for encrypting data of the vehicle with a cipher key is interposed between the controller and the nonvolatile memory of the in-vehicle”, is more specific to providing security for the data of the vehicle by encrypting the data with a cipher key.

It would have been obvious to one having ordinary skill in the art to recognize that by encrypting the security data with a cipher key only authorized user can access the vehicle locking and unlocking mechanism thereby stopping any unauthorized access to the secure vehicle data. Therefore, it is clearly that Claims 1 – 2 of patent 7,002,449 anticipate claims 1 – 5 of instant application.

Drawings

5. Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

6. Claim 1 is objected to because of the following informalities: Claim 1 recites, "The handling device and the security data is encrypted with the cipher key and stored into the nonvolatile memory according to the instruction from the controller". Replace "according to **the instruction** from the controller" with "according to **the control instruction** from the **portable unit**" (**Emphasis added**).

Claim 3 is objected to because of the following informalities: Claim 3 recites, "The handling device and the other nonvolatile memory is a ROM". Replace "The handling device and **the other** nonvolatile memory is a ROM" with "The handling device and **another** nonvolatile memory is a ROM" (**Emphasis added**).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1 – 5 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. “The ID (portable unit ID and in-vehicle unit ID) with a second cipher key by the data encryption controller10. and this is the characteristic points of the invention.” and “According to the invention, since ID is encrypted with the second cipher key and stored in the EEPROM 9, the ID can not be decoded even if the data is read out by others”, (see instant specification paragraph [0026]), **a second cipher key**, critical or essential to the practice of the invention, but not included in the claim(s). See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Applicant states that “the remote keyless entry (RKE) for locking or unlocking the door locking mechanism of a vehicle with one-way communication from a portable unit to an in-vehicle unit as well as a passive PKE that is two-way communication between a portable unit and an in-vehicle unit” is well known in the art (Description of the Related art, instant specification paragraph [0004 – 0010]. Applicant further discloses, “If ID is stored in the EEPROM directly in the form of its original signal like the convention technique, there is such a fear that the ID may be decoded by others because of the structure of the EEPROM, which is a serious problem from the viewpoint of the security of the vehicle. Together with the first cipher key for a request signal and a response

Art Unit: 2136

signal, the second cipher key is also stored in the ROM 8 whose data is difficult to decode". However, applicant does not include "a second cipher key" and "ID that is encrypted with the second cipher key" in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 – 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Berra (U.S. Patent 5,787,367).

9. As per Claim 1, Berra teaches "an in-vehicle unit having a portable unit, in in-vehicle system, and a communication unit; and a vehicle having the in-vehicle unit, an in-vehicle system, and a communication unit (Figure 1, 2; Column 3 lines 61 – 65); and a portable unit for giving a control instruction to the in-vehicle system of the vehicle through communication with the communication unit, wherein an encryption unit for encrypting security data of the vehicle with a cipher key is interposed between the controller and the nonvolatile memory of the in-vehicle unit (Column 4 lines 37 – 50), and the security data is encrypted with the cipher key and stored into the nonvolatile memory according to the instruction from the controller" (Column 4 lines 54 – 60).

Art Unit: 2136

10. As per Claim 5, Berra teaches “encrypting the security data with a cipher key in an encryption unit provided between the controller and the first nonvolatile memory of the in-vehicle unit (Column 4 lines 37 – 50), and storing the encrypted signal into the first nonvolatile memory and storing the cipher key into a second nonvolatile memory” (Column 4 lines 54 – 60).

11. As per Claim 2, “the cipher key is stored in another nonvolatile memory that is different from the nonvolatile memory storing the encrypted signal of the security data”, (Column 4 lines 54 – 60 and Column 5 lines 51 – 65).

12. As per Claim 3, “the security data includes a portable unit ID, the nonvolatile memory is an EEPROM, and the other nonvolatile memory is a ROM” (Column 4 lines 54 – 60).

13. As per Claim 4, “an in-vehicle unit ID is stored in the EEPROM in addition to the portable unit ID”, Berra teaches “The EEPROM contains first password message (vehicle identification number) and unique code identifying the particular engine circuit (portable unit identification number)” (Column 5 lines 22 – 39).

Conclusion

14. Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO Form 892.

Applicant is urged to consider the references. However, the references should be evaluated by what they suggest to one versed in the art, rather than by their specific disclosure. If applicants are aware of any better prior art than those are cited, they are required to bring the prior art to the attention of the examiner.

Art Unit: 2136

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pramila Parthasarathy whose telephone number is 571-272-3866. The examiner can normally be reached on 8:00a.m. To 5:00p.m.. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on 571-232-4195. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR only. For more information about the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pramila Parthasarathy

March 02, 2007.

